

R.A.P. Sheet

Feb 2022 – Theme: Updates on Removal and Remedial Actions (Building DDDD and soil cleanup)

Actions of Note/This year's developments

Key terms:

Removal Action – An interim response to make incremental progress and reduce risk. There are 2 “flavors” – Time critical (imminent risk within 6 months- TCRA) and non-time critical – still a risk, but longer term (NTCRA). In practice, these are typically used to deactivate, decontaminate, demolish, and dispose (DDDD) buildings and ancillary structures. Since the action is an interim step and may be time sensitive, there is arguably less information for public involvement and less detailed preparatory reporting. Work is completed under an “Action Memo.”

Remedial Action – a cleanup or stabilization action that is a step towards meeting final remedial goals, as established in a Record of Decision. Since this is one of the last steps in the cleanup of waste sites, there has been a significant amount of data collected, analyzed, presented for public comment, and documentation of how the work will be completed.

Plutonium Finishing Plant (PFP, AKA Z-plant) NTCRA

Until 1989, PFP was the last stop in reprocessing, and where the completed plutonium pucks were stored before leaving the site. It was a highly contaminated building that required added security and maintenance given the nature of its contamination. The Removal Action project began about 20 years ago (<https://pdw.hanford.gov/document/DA00914134>), with open-air physical demolition beginning in 2016. A contamination spread, workforce re-shuffling, and COVID delayed the project, but it was completed this winter. The building removal allowed DOE to sample soils under the remaining concrete slab. The preliminary results indicate that the average soils for 3 feet under the slab should be treated as transuranic (TRU) waste, which will need to go to the Waste Isolation Pilot Plant (WIPP) if they are removed from the ground <https://pdw.hanford.gov/document/AR-18261>. WIPP closes in 2050, and Hanford shipments are scheduled to resume in 2028.

200-East Area Tier 2 Buildings NTCRA

A 2011 Action Memo <https://pdw.hanford.gov/document/0072140H> lists structures which were contaminated and at risk. The demolition has been progressing, and a draft Removal Action Work Plan was submitted on Jan 4, 2022 for “Tier-2” buildings in the Plutonium Uranium Extraction (PUREX) complex <https://pdw.hanford.gov/document/AR-18248>. A revised sampling and analysis plan for PUREX Tier 2 buildings also was published

<https://pdw.hanford.gov/document/AR-18297>. Tier 2 buildings/structures are addressed in the Tri-Party Agreement Action Plan as chemically and/or radiologically contaminated buildings/structures that require a CERCLA response action because of their potential for substantial threat of release of hazardous substances (not heavily shielded like Canyons).

200-West Area Tier 2 Buildings NTCRA

A draft Removal Action Work Plan for the 200-w Tier 2 building NTCRA also was published this year <https://pdw.hanford.gov/document/AR-18291>. The draft Action Memo was published last year <https://pdw.hanford.gov/document/AR-15355>

100-D/H Area

A revised Remedial Design/Work plan for 100-D/H was published this year <https://pdw.hanford.gov/document/AR-18373>. The remediation is being conducted in accordance with a 2018 Record of Decision (<https://pdw.hanford.gov/document/0065047H>)

Somewhat Related:

A Tri Party Agency team met to find ways to speed up cleanup without sacrificing quality. The Representative Analogous Site Coordinating Agency Liaisons (RASCAL) team proposed making a new Operable unit, that is full of waste sites with similar characteristics (200-IA-1). The document spelling out preliminary remediation goals for that OU was published in December 2021 <https://pdw.hanford.gov/document/AR-18207> .

Other Removal Actions RAP is Following:

PFP Aging Subsurface Structures TCRA

Three highly contaminated subsurface structures at risk of collapse were interim stabilized with grout. <https://pdw.hanford.gov/document/AR-03753>. Eventually, these waste sites will be remediated and the materials will be removed, treated, and disposed, as dictated by the Record of Decision (<https://pdw.hanford.gov/document/0093644>). The latest work plan for the remediation was revised in 2021, and has the remediation scheduled to begin in 2024-2025 <https://pdw.hanford.gov/document/AR-12741>. These soils will also likely have to go to WIPP. See advice #306 for more detail on the TCRA <https://www.hanford.gov/page.cfm/hab/AdviceandResponses> .

B plant

The Board has also been following a NTCRA at B-plant (see advice 308) <https://www.hanford.gov/page.cfm/hab/AdviceandResponses>. The Action Memo for this NTCRA was published last year (<https://pdw.hanford.gov/document/AR-15988>).